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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/347,689 | 07/02/1999 | GEORGE TYSON TUTTLE | SILA-045 | 4193 |

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04/21/2004

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| EXAMINER |
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SINGH, RAMNANDAN P

| ART UNIT | PAPER NUMBER |
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2644

DATE MAILED: 04/21/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/347,689

Applicant(s)

TUTTLE ET AL.

Examiner

Ramnandan Singh

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 and 29-34 is/are allowed.
- 6) ☒ Claim(s) 18-23, 25-28 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02 February 2004 have been fully considered but they are not persuasive.

Applicant's argument—"Claim 18 includes at least one variable current circuit responsive to the hookswitch control signal to decrease a current drawn from the phone line prior to changing the state of a hookswitch" on pages 9-10.

Examiner's response ----The examiner disagrees. In practice, a "variable current circuit" may be any circuit operated under a variable voltage. It may, further, be noted that a "variable **current circuit**" is not a "variable **current source**". Regarding the argument, "to decrease a current drawn from the phone line prior to changing the state of a hookswitch ", Applicant is respectfully directed to the operation of telephone 18 prior to the shut off of the telephone 18 [Snyder [US 5,343,514], [col. 7, lines 13-19]].

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18-23, 25-28, 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder [US 5,343,514].

Regarding Claim 18, Snyder teaches a hookswitch transition circuit a telephone line powered system that is capable of being connected to phone lines [col. 10, lines 22-38], as shown in Figs. 4A and 4B, the hookswitch transition circuit comprising:

a hookswitch control node 38 carrying a hookswitch control signal; an AC bypass 39; a control switch 40; and a hookswitch control circuit 44, wherein when the telephone 10 goes "off-hook", it causes current to flow through a loop detector and a slope control circuit 38, and the switch 40, as indicated in Figs. 6 and 7, is operated as a first hook switch control for the system [col. 4, lines 1-11; col. 6, line 61 to col. 7, line 19; col. 4, lines 38-44; col. 4, line 62-68].

In response to the Applicant's argument, the Examiner states that, in practice, a "variable current circuit" may be any circuit operated under a variable voltage. It may, further, be noted that a "variable current circuit" is not a "variable current source". Regarding the argument--"to decrease a current drawn from the phone line prior to changing the state of a hookswitch", Applicant is respectfully directed to the operation of telephone 18 prior to the shut off of the telephone 18 [Snyder [US 5,343,514], [col. 7, lines 13-19]].

Claims 25, 35 are essentially similar to Claim 18 and are rejected for the reasons stated above .

Regarding Claims 19-21, 26-27, 36-37, see Figs. 6 and 7.

Regarding Claims 22-23, 28, Snyder teaches an off-current level and an on-hook current level wherein the on-hook current level is much lower than the off-hook current level, which is well known in the art [col. 3, line 62 to col. 4, line 44; Figs. 4A and 4B].

Allowable Subject Matter

4. Claims 1-17 and 29-34 are allowable.

5. Examiner's Statement of Reasons for Allowance:

This invention relates a communication system having digital access arrangement (DAA) circuitry including an isolation barrier for connecting to a variety of phone line standards. Claim 1 identifies the uniquely distinct feature of the communication system comprising: phone line side circuitry and powered line circuitry coupled through an isolation barrier; a hookswitch transition node carrying a hookswitch transition signal indicative of changing a hookswitch within the phone line from an off-hook state to an on-hook state; and current control circuitry coupled to the hookswitch

transition node within the phone line side circuitry, the current control circuitry operating prior to the completion of a hookswitch transition to enable a decrease in a current level drawn from the phone line in response to the hookswitch transition signal. As such, claim 1 requires current control circuitry operating prior to the completion of hookswitch transition in a DAA (i.e. isolation barrier) environment. While the closest prior art, Borke [US 5,801,517] and Clemo [US 5,714,809] each teach switching control circuits, Borke using a current control circuit for a switching regulator, and Clemo using a soft switching circuit for controlling the electrical power applied to a circuit; neither Borke nor Clemo suggest to utilize such switching control circuits in a phone line hookswitch application in a DAA (i.e. isolation barrier) environment. As such, the prior art, either singularly or in combination, fail to anticipate or render the above underlined limitation obvious. Therefore, claim 1 is allowable.

Claims 10 and 29 are essentially similar to claim 1 and hence they are allowable.

Claims 2-9, 11-17, 30-34 are allowable due to dependence from claims 1, 10 and 29 respectively.

6. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 24 will be allowable because it teaches a switch coupled to a hookswitch transition control node within a phone line side DAA

circuit. The reasons for allowance are similar to that of claim 1 discussed in paragraph 5 above.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (703)308-6270. The examiner can normally be reached on M-F(8:00-4:30).

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester Isen can be reached on (703)-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh
Examiner
Art Unit 2644



SPE, Art Unit 2644